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ABSTRACT

The curricula and methods used in workplace literacy programs were reviewed through a search of the ERIC database. The search was intended to identify the following: literacy skills recommended for teaching literacy through workplace curricula; skills that have been taught through workplace literacy programs; and criteria used to determine program effectiveness. Of the 328 abstracts located through the search, 92 were selected for analysis. As a result of the analysis, the following 15 skills were identified as being taught in at least some workplace literacy programs: reading, writing, vocabulary, grammar, mathematics, speaking, listening, problem solving, computer-related English as a second language, self-esteem, leadership, teamwork, self-confidence, and learning to learn. The first 10 skills were categorized as basic literacy skills, the next 4 as personal skills, and the final skills as an advancement skill. Skills in the basic literacy category were more likely to be recommended and taught that were skills in the personal and advancement categories. All the curricula and literacy programs reviewed described teaching and writing, whereas fewer than 25% taught teamwork and leadership. Most workplace literacy programs were designed to enable employees to perform specific job tasks. (Contains 119 references and 3 tables.) (MN)

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Literacy in the Workplace: An Examination of Curricula and Programs

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Literacy in the Workplace: An Examination of Curricula and Programs

ABSTRACT

Recent studies, concentrating on adult workers, have shown that an alarming number of those workers need literacy training in the workplace. Literacy training programs and curricula are available. However, concerns about which skills are provided through those programs to employees have surfaced. I have examined descriptions of workplace programs and workplace curricula to identify skills that are offered. Accordingly, herein is a report of skills that are offered, those that are not offered, and methods in which literacy programs have measured participation effectiveness. Findings should challenge those who work in literacy training to develop programs and curricula that include not only basic literacy but personal and advancement skills as well.

Introduction

Adults in the workplace are expected to read and comprehend various forms of written materials. These materials are, generally, letters, reports, lists, directions, charts, blueprints, manuals, graphs, and/or memorandums. Occasionally, when employers find that their employees are experiencing difficulty with reading materials, workplace literacy training programs are provided. For example, in one technological company, a number of employees, who were already proficient readers, were required to read and comprehend large volumes of

unusually difficult material within a short period of time. Consequently, those employees opted to enroll in company sponsored reading classes where materials such as, company reports, manuals, and graphs became the principle reading materials. In addition, using those materials enabled the employees to practice and learn a number of beneficial reading strategies. A survey of those employees, one year later, revealed that they were still using reading strategies learned from the classes (Scales & Hamer, 1995).

A report by McKeag (1993), concerning a company within the steel industry, found from interviews of 25 employees, 8 supervisors, 2 representatives from management, and 2 representatives of the union, that about half had difficulty completing forms and with applying arithmetic applications. Although most of the participants had completed, at least a high school education, their basic skill deficiencies required training in reading, writing, and computation. As a result, training materials were developed for that sector. Similarly, Cole (1994a) examined the workplace reading, mathematics, communications, and productive thinking skills of 317 employees within the mining industry. Results of his examination revealed that most of the reading materials were beyond the employees reading comprehension levels. Additionally, these employees were willing to improve their basic skills if improvement meant an opportunity to move from one work area to another and/or the possibility of receiving a promotion. In another study, Cole (1994b) surveyed the literacy skills of 125 employees within the aerospace industry. Results of that survey revealed that the company documents were excessively complicated in language, structure, and presentation. Readability of the documents ranged from very easy to very difficult. Considering these findings, he recommended that

curriculum materials be developed and used in a workplace literacy training program with these employees.

Workplace-specific literacy training programs and curricula designed for training outside the workplace are often task focused and contextualized. In fact, Gershwin (1994) acknowledged that, over the last decade, the field of workplace literacy has drawn heavily from the research on reading which has lead to the focus on task analysis and the development of contextualized basic skills instruction. For example, Alamprese and Kay (1993) reported on a basic literacy skills program designed for cafeteria employees in which reading, writing, mathematics, problem solving, and communication skills were addressed. Likewise, Foucar-Szocki (1992) reported on basic literacy skills instruction provided for employees at Corning Incorporated and American Safety Razor focusing on similar ability. In each of those company cases' employees later applied and practiced skills acquired from the literacy instructional programs.

Curricula for training outside the workplace have focused on reading and writing skills. For example, Moor and Diller (1994) emphasized the development of reading strategies for previewing, understanding, and recalling information in the workplace. Instructional techniques used to teach these strategies included comprehension and vocabulary development for specific kinds of workplace information. Consol (1994) emphasized effective writing strategies in the workplace which were designed to help trainees plan, draft, revise, and use appropriate language. Specifically, trainees were to choose a topic for a writing assignment, write a draft of the assignment, use direct and affirmative language in their written work, and revise and rewrite their assignment.

Significant improvements in employee performance have been found to occur once workplace literacy instruction in basic skills is provided (Mrowicki et al., 1995). The advantage of basic literacy skills training in a workplace program was also reported by Lashof (1992). An external evaluation of that program showed the work performance of employees at two GE Aircraft Engines sites and two Burlington Electric sites improved.

Which skills appear to influence employee performance in the workplace? Carnevale, Gainer, and Meltzer (1990) and Kerka (1990) presented learning to learn; reading, writing, and computation; speaking/oral communication and listening; problem solving and creative thinking; self-esteem, motivation, and goal setting; teamwork, interpersonal skills, and negotiation; leadership and organizational effectiveness as skills that employees need to perform satisfactorily in the workplace. Norback and Forehand (1995) showed computation, document, prose, identification, computer-related skills, following directions, synthesizing, contingent decision making, and writing as categories for literacy skills that are needed in the workplace.

Recognizing that literacy programs and curricula have emphasized various basic workplace skills and that a conglomerate of skills are needed by employees, I have three remaining questions. Specifically, which skills are being recommended through curricula, which skills are being offered through workplace literacy programs, and how do programs measure their effectiveness? Responses to these questions might offer workplace literacy curricula and program developers additional alternatives for program planning as they consider the specific literacy needs of employees. Moreover, I hope that these responses will generate

more questions for the reader and that the reader will use them to question current adult literacy offerings through curricula and programs.

Method

Literature Sample

Workplace literacy literature includes speeches, program descriptions, journal articles, reports, etc. Much of this literature in full-text or in abstract form has been stored in ERIC's (Educational Resources Information Center) database. This database has been storing literature since 1966. With that history of storing information, I felt that an exhaustive list of workplace literacy literature could be found through this database. I have therefore limited my sample to the sources found through the ERIC database.

The sample for this report consisted of abstracts and full-text (when necessary) of workplace literacy curricula and workplace programs. All included materials had to describe a curriculum designed to teach workplace literacy skills or a workplace literacy program. Three-hundred-twenty-eight abstracts were found in the database; 92 met the criteria for inclusion in this study.

Procedures

My search of the literature through the ERIC database with the terms: (a) workplace literacy, training, basic skills, reading, and writing; (b) workplace literacy, curriculum or classes or lessons, basic skills, reading, writing, and math; and (c) workplace literacy, reading, and writing produced 73 abstracts for the first search, 48 for the second search, and 207 for the third search. Sorting of the abstracts showed that all but 5 from the first and second searches were included in the third search. I read each abstract to determine whether it was of a workplace literacy program

and/or workplace literacy curricula. Abstracts that summarized studies about employees that were non-training literacy focused, newsletters, curricula for elementary and high school students, and position papers about workplace literacy were eliminated.

Using lists of literacy skills suggested (The bottom line ..., 1988; Carnevale, Gainer, & Meltzer, 1990; Kerka, 1990; Atkinson, Spilsbury, & Williams, 1993; Norback & Forehand, 1995; Bergman, 1995) as being important for employees in the workplace, I generated a list of 15 skills for use in this report. The skills are: reading, writing, vocabulary, grammar, mathematics, speaking, listening, problem solving, computer-related, ESL, self-esteem, leadership, teamwork (to include communicating on the job and working well with others), self-confidence, and learning to learn. I categorized the skills into three groups as follows: (a) basic literacy (reading, writing, vocabulary, grammar, mathematics, speaking, listening, problem solving, computer-related, and ESL), (b) personal (self-esteem, leadership, teamwork, and self-confidence), and (c) advancement (learning to learn) skills. My task was to read the abstracts (and full-text when the abstract did not include a description of literacy skills nor a measure of program effectiveness) to determine which of these 15 skills were recommended to be taught through curricula designed for workplace programs, which were taught in workplace literacy programs, and how effectiveness of programs were measured.

Results

I examined workplace literacy materials (a) to identify literacy skills recommended for teaching through workplace curricula, (b) to identify skills that were taught through workplace literacy programs, and (c) to identify criteria used to determine program effectiveness. My findings are presented on Tables 1, 2, and 3. Tables 1 and 2 show the author or title, year of

publication, and workplace skills. Table 3 shows the author or title, year of publication, and criteria used to evaluate programs.

Table 1 shows which of the 15 workplace skills are recommended for teaching in each curriculum. Of the 40 abstracts that described workplace curricula, reading and writing skills were recommended in every curriculum, and mathematics was recommended in 58% of curricula. Speaking was recommended in 45% of curricula, vocabulary 30%, listening in 28%, problem solving in 27%, grammar and ESL--each 20%. Computer-related, leadership, teamwork, and learning to learn were included in less than 20% of curricula. Self-esteem and self-confidence were not mentioned among the curricula examined. Among the 40 sets of materials, only Wrigley's (1987) curriculum included more than 50% of the 15 skills identified as necessary for employees in the workplace. Seven other curricula included at least 40% of the skills and the remaining curricula contained less than 35%. A total of 180 skills were found across the 40 curricula; 95% were in the basic literacy skills category, 4% were personal, and 1% was in the advancement category. Only two skills, self-esteem and self-confidence were not listed among the curricula offerings.

Insert Table 1 about here

Table 2 summarizes the workplace skills mentioned in reports of workplace literacy programs. Abstracts for 52 workplace literacy programs were found. In every program (100%) reading and writing were taught, in 67% mathematics, in 35% problem solving, in 25% speaking and ESL, and in 21% teamwork. Vocabulary, grammar, listening, computer-related, self-esteem,

leadership, and self-confidence were taught in fewer than 20% of the programs. Learning to learn was not mentioned. Only two (VISIONS for..., 1995; Mercer County..., 1992) of the 52 programs included more than 50% of the workplace skills and seven other programs included at least 40%. The remaining programs taught less than 35% of the skills. Across the 52 programs a total of 219 skills were found; 93% were in the basic literacy skills category, 7% were personal, and none were found in the advancement category.

Insert Table 2 about here

All of the workplace programs were designed to increase the literacy skills of employees in specific worksites. The criteria used by programs to determine program effectiveness varied. I grouped the criteria as evaluations, testing, reports, and student participation. Several of the programs used more than one way to evaluate the effectiveness of their programs. Table 3 presents a summary of the criteria used to evaluate the programs. Thirteen of the workplace programs used outside and internal program evaluations, 14 used reports from supervisors and program participants, 18 used testing of the participants, and 13 used participants' performance in class and on their jobs. The criteria showed some measure of success for the participants. Measurement of the skills were related to their workplace performance.

Insert Table 3 about here

Summary, Discussion, and Conclusion

This report shows an examination of workplace literacy curricula and workplace programs. Through descriptions of each I found that, although there are many, the sole emphasis tends to be placed on certain basic workplace literacy skills. Thus, I sought to identify which skills were and should be emphasized in literacy programs and how the programs measured their effectiveness of teaching those skills. I found 15 skills and varied means of program measures that included evaluating, reporting, testing, and job performance. The 15 workplace literacy skills were reading, writing, vocabulary, grammar, mathematics, speaking, listening, problem solving, computer-related, ESL, self-esteem, leadership, teamwork, self-confidence, and learning to learn. The first ten skills were categorized as basic literacy skills, the next four as personal, and the last as an advancement skill.

Among the workplace curricula and workplace literacy programs, I found that the skills in the basic literacy category were more likely to be recommended and taught than the skills in the personal and advancement categories. Specifically, all curricula and literacy programs described teaching reading and writing. The third and most-often listed skill, in both curricula and literacy programs, was mathematics. Following were curriculum materials that included speaking, vocabulary, listening, problem solving, grammar, ESL, and computer-related skills. Teamwork and leadership were listed in fewer than 25% of the curriculum materials and workplace programs. Self-esteem and self-confidence were listed in the workplace materials but not the curriculum materials. The advancement skill 'learning to learn' appeared in the curriculum materials but not in the workplace programs. Overall, greater emphasis was placed

on basic literacy skills in curricula and programs when compared to personal and advancement skills.

Although results from the workplace literacy programs did show that employee skills were upgraded for their immediate jobs, there was less attention to those skills (personal and advancement) that aid employees in examining their impact on others and their future workplace goals. Waugh (1990) noted that workplace literacy skill requirements are based on the needs of each workplace and its workers. Consequently, curricula were written for specific worksites. Employers in those worksites were often specific about the training for their employees. For example, based on a needs assessment, 454 employees of Georgetown Steel participated in a workplace literacy program to improve their skills in mathematics, reading, writing, and problem solving (Hudson & Gretes, 1994). After job needs were determined for about 500 employees in two companies in Trenton, NJ, instruction in reading, writing, mathematics, problem solving, and ESL were provided (Mercer County..., 1994). Howell (1993) indicated that 98 rural grain elevator operators from two companies were interviewed to determine their literacy needs. Subsequently, they felt a need for training in writing, reading, oracy, and numeracy. One workplace literacy curriculum that could be customized to a specific worksite recommended teaching reading, writing, mathematics, and ESL (Workplace literacy..., 1994).

In effect, my report has shown that, despite the preponderance of documents about workplace literacy that have become available during the 1990s, there still seems to be a need for research to examine and encourage the necessity of a full complement of skills (workplace basic literacy, personal, and advancement) in the workplace. Within the materials reviewed for

this report, limited attention was given to skills in the personal and advancement categories. Moreover, the presence of basic literacy skills in workplace curricula (95%) and workplace programs (93%) far out numbered the other skills. Therefore, unlike past curricula and workplace programs where a low percentage of personal and advancement skills were included future programs might need to address these skills.

Implications

The primary purpose of literacy training is to provide employees with skills that will enable them to perform job requirements. Thus, my primary concern was to find which literacy skills are offered to employees through curricula and programs. Freire (1970) suggested that literacy development empowers employees to do their job task, as well as to use those literacy skills beyond an identified job task. Employers want employees who will perform job tasks in the least amount of time, who work well with others, and who project a positive company image apart from the workplace. Although, many employees may know how to read and write, they may be unaware of the importance of specific workplace vocabulary and grammar. Also, their speaking and listening skills may be underdeveloped for specific worksites. Likewise, if their background experiences have been that of surviving without others, they may not realize the importance of teamwork, initiating job activities, and solving job problems.

The infusion of new technology and the movement from manufacturing to service and information industries in the workplace will require workers with a variety of skills. Therefore, many employers will need to recruit and retrain workers from segments of the population they had not seriously considered as employees (Klimek-Suchla, 1992). Many of

these employees will need training in basic literacy, personal, and advancement skills because when employees are not able to perform their job tasks, due to a lack of basic skills, their employers and companies suffer. Given these facts, I have concluded that workplace literacy programs should be designed to include components that not only provide training in basic literacy skills but training in personal and advancement skills as well.

Although, employers currently offer literacy training to employees, that training is often for a specific job task. Employees take advantage of those training options to improve their job performance and sometimes to position themselves for other jobs or for promotions within the worksite. With the reality of company-downsizing and company-refocusing, it would seem appropriate and cost effective for employers to provide training to ensure that their current employees would not only be empowered with the necessary basic literacy skills to perform their current job tasks but would also have the skills to perform other job tasks as well as interact appropriately with others in the worksite. This type of training for the worksite could provide profitable advantages for companies, such as: (a) current employees could perform several job tasks which could reduce the cost of hiring and training new employees; (b) trained employees could provide training for new employees which may reduce the cost of hiring outside trainers; and/or (c) employees could encourage the importance of teamwork as a means of promoting the interest of the company.

Finally I am optimistic that, besides teaching basic literacy skills in the workplace, my report will also encourage those who prepare workplace curricula and conduct workplace literacy training to include more personal and advancement skills in materials developed and used in workplace training sites.

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Table 1
Skills Recommended through Curricula for Workplace Literacy Training (N = 40)

Authors/Programs	Workplace Skills															*f(%)*
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Basic skills curriculum (1995)	X	X			X											3(20)
Burt (1995)	X	X	X	X	X											5(33)
Lewandowski (1995a)	X	X	X	X		X	X	X								7(47)
Lewandowski (1995b)	X	X	X	X		X	X									6(40)
Mrowicki & Others(1995)	X	X	X		X	X										5(33)
Blumner & Others (1994)	X	X		X	X											4(27)
Diamonite 2000 (1994)	X	X			X			X							X	5(33)
Diller & Moore (1994)	X	X			X			X								4(27)
Garcia & Others (1994)	X	X			X			X					X			5(33)
Medina & Others (1994)	X	X				X	X					X				5(33)
SCORE (1994)	X	X	X		X	X		X							X	7(47)
Skills for (1994)	X	X			X	X		X		X						6(40)
Workplace (1994)	X	X	X		X					X						5(33)
Workplace literacy (1994)	X	X			X					X						4(27)
Bollinger & Sweeney (1993)	X	X	X													3(20)
Building facilities (1993)	X	X			X											3(20)
Howell (1993)	X	X			X	X										4(27)
Janney-Pace & Fox (1993)	X	X			X	X	X									5(33)
Leidig & Others (1993)	X	X				X		X					X			5(33)
Project (1993)	X	X	X			X	X			X			X			7(47)
Project EXCEL (1993)	X	X				X	X			X			X			6(40)
Project EXCEL San (1993)	X	X				X	X			X			X			6(40)

Table continued

Authors/Programs	Workplace Skills															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	*f(%)*
Project PRO (1993)	X	X			X			X		X					5(33)	
Roberts (1993)	X	X				X	X									4(27)
Communication (1992)	X	X			X	X										4(27)
Dyer (1992)	X	X				X	X	X								5(33)
English Language (1992)	X	X	X			X										4(27)
Jones & Rendon (1992)	X	X	X	X												4(27)
Language skills (1992)	X	X														2(13)
McBride & Others (1992)	X	X														2(13)
Reading/writing (1992)	X	X														2(13)
Skills today (1992)	X	X			X											3(20)
Smith & King (1992)	X	X	X	X												4(27)
Conrath & Others (1991)	X	X			X	X				X						5(33)
Nickles & Others (1990)	X	X			X											3(20)
Van Duzer & Others (1990)	X	X			X											3(20)
Huggins (1989)	X	X		X												3(20)
Gleich & Others (1988)	X	X			X											3(20)
Johnson (1988)	X	X		X	X		X		X							6(40)
Wrigley (1987)	X	X	X		X	X	X	X					X			8(53)
Frequency	40	40	12	8	23	18	11	10	1	8	0	1	6	0	2	180
Percentage	(100)	(100)	(30)	(20)	(58)	(45)	(28)	(25)	(3)	(20)		(3)	(15)		(3)	

Key

1. Reading
2. Writing
3. Vocabulary
4. Grammar
5. Mathematics
6. Speaking
7. Listening
8. Problem solving
9. Computer-related
10. ESL
11. Self-esteem
12. Leadership
13. Teamwork
14. Self-confidence
15. Learning to learn

Table 2
Skills Taught in Workplace Literacy Programs and Projects (N = 52)

	Workplace Skills															
Authors/Programs	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	*f(%)*
Basic skills (1995)	X	X			X											3(20)
De Zeeuw & Klemme (1995)	X	X			X											3(20)
El Camino (1995)	X	X			X				X	X		X				6(40)
Hellman (1995)	X	X			X		X	X		X						6(40)
VISIONS for (1995)	X	X	X		X		X	X		X			X			8(53)
College of (1994)	X	X			X					X						4(27)
Hudson & Gretes (1994)	X	X			X			X								4(27)
Mercer County (1994)	X	X			X			X	X	X			X			7(47)
Project step (1994)	X	X				X										3(20)
Rural textile (1994)	X	X			X	X	X	X					X			7(47)
Schroyer & Payne (1994)	X	X		X	X				X			X	X			7(47)
Workplace skills (1994)	X	X	X	X	X											5(33)
Beaudin (1993)	X	X			X											3(20)
Burkhart & Sullivan (1993)	X	X								X						3(20)
Hellman (1993)	X	X			X		X	X					X			6(40)
Howell (1993)	X	X			X	X										4(27)
Lessard (1993)	X	X			X			X								4(27)
McKeag (1993)	X	X			X											3(20)
Merlin (1993)	X	X			X					X						4(27)
Sanford Maine (1993)	X	X			X			X		X						5(33)

Table continued

Authors/Programs	Workplace Skills															*f(%)*
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Wisconsin Work (1993)	X	X	X		X											4(27)
Workplace literacy (1993)	X	X			X			X					X			5(33)
Workshops (1993)	X	X			X		X	X					X			6(40)
Building integrated (1992)	X	X						X		X						4(27)
Cheverton (1992)	X	X			X			X					X			5(33)
Colorado workplace (1992)	X	X			X											3(20)
Foucar-Szocki (1992)	X	X			X			X					X			5(33)
Health care (1992)	X	X								X						3(20)
Hellman (1992)	X	X			X	X	X									5(33)
Job enhancement (1992)	X	X			X	X	X									5(33)
Lashof (1992)	X	X														2(13)
Mercer County (1992)	X	X			X	X	X	X		X	X					8(53)
Striving (1992)	X	X						X					X			4(27)
The skills (1992)	X	X			X											3(20)
Workplace literacy (1992)	X	X			X											3(20)
Crandall & Pharness (1991)	X	X														2(13)
O'Gorman (1991)	X	X			X											3(20)
Breeden & Bowen (1990)	X	X				X		X								4(27)
Carr (1990)	X	X				X								X		4(27)
Coffee & Others (1990)	X	X			X								X			4(27)
Kissac & Clymer-Spradling (1990)	X	X				X	X									4(27)

Table continued

Authors/Programs	Workplace Skills															*f(%)*
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Wisconsin Work (1993)	X	X	X		X											4(27)
Workplace literacy (1993)	X	X			X			X					X			5(33)
Workshops (1993)	X	X			X		X	X					X			6(40)
Building integrated (1992)	X	X						X		X						4(27)
Cheverton (1992)	X	X			X			X					X			5(33)
Colorado workplace (1992)	X	X			X											3(20)
Foucar-Szocki (1992)	X	X			X			X					X			5(33)
Health care (1992)	X	X								X						3(20)
Hellman (1992)	X	X			X	X	X									5(33)
Job enhancement (1992)	X	X			X	X	X									5(33)
Lashof (1992)	X	X														2(13)
Mercer County (1992)	X	X			X	X	X	X		X	X					8(53)
Striving (1992)	X	X						X					X			4(27)
The skills (1992)	X	X			X											3(20)
Workplace literacy (1992)	X	X			X											3(20)
Crandall & Pharness (1991)	X	X														2(13)
O'Gorman (1991)	X	X			X											3(20)
Breeden & Bowen (1990)	X	X				X		X								4(27)
Carr (1990)	X	X				X								X		4(27)
Coffee & Others (1990)	X	X			X								X			4(27)
Kissac & Clymer-Spradling (1990)	X	X				X	X									4(27)

Table continued

Authors/Programs	Workplace Skills															*f(%)*
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
Li & Marn (1990)	X	X			X					X						4(27)
Literacy... (1990)	X	X			X		X	X								5(33)
Nurss (1990)	X	X				X		X								4(27)
Older displaced... (1990)	X	X														2(13)
POWER for... (1990)	X	X		X	X											4(27)
The skills... (1990)	X	X				X										3(20)
Working smart... (1990)	X	X			X	X										4(27)
Workplace 2000... (1990)	X	X			X	X										4(27)
Workplace skills... (1990)	X	X		X												3(20)
Burenstein (1989)	X	X														2(13)
Gross (1989)	X	X								X						3(20)
Frequency	52	52	3	4	36	13	10	18	3	13	1	2	11	1	0	219
Percentage	(100)	(100)	(6)	(8)	(67)	(25)	(19)	(35)	(6)	(25)	(2)	(4)	(21)	(2)		

Key

1. Reading
2. Writing
3. Vocabulary
4. Grammar
5. Mathematics
6. Speaking
7. Listening
8. Problem solving
9. Computer-related
10. ESL
11. Self-esteem
12. Leadership
13. Teamwork
14. Self-confidence
15. Learning to learn

Table 3
Criteria Used by Workplace Literacy Programs

Authors/Programs	Criteria used by Programs
	Program Evaluations (n=13)
El Camino... (1995)	Outside evaluation
Hellman (1995)	Testing, Outside evaluator
VISIONS for... (1995)	Testing, Outside evaluator
Mercer County... (1994)	External evaluator
Rural textile... (1994)	External evaluator report
Beaudin (1993)	Independent evaluation
Lessard (1993)	Class evaluations
Workshops... (1993)	Formative and summative evaluation
Job enhancement... (1992)	Evaluation report
Lashof (1992)	External evaluation
Kissac & Clymer-Spradling (1990)	External evaluation, Testing
Older displaced... (1990)	Project evaluation
The skills... (1990)	Program evaluation
	Reports (n=14)
College of... (1994)	Supervisors report
McKeag (1993)	Participant report
Workplace literacy... (1993)	Companies report
Cheverton (1992)	Reported success
Colorado workplace... (1992)	Reported work improvement
Foucar-Szocki (1992)	Reported positive outcomes
Health care... (1992)	Reported improvement
The skills... (1992)	Reported completion of program
Coffee & Others (1990)	Reported gains
Li & Marn (1990)	Supervisor report
Literacy... (1990)	Participant report
Nurss (1990)	Participant report
Workplace 2000... (1990)	Participant report
Workplace skills... (1990)	Supervisors reported gain
	Testing (n=18)
Basic skills... (1995)	Testing, Grade level
De Zeeuw & Klemme (1995)	Testing, Task completion
Hellman (1995)	Testing, Outside evaluator
VISIONS for... (1995)	Testing, Outside evaluator
Hudson & Gretes (1994)	Testing, Interview
Project step... (1994)	Testing
Schroyer & Payne (1994)	Testing
Workplace skills... (1994)	Testing
Hellman (1993)	Testing

Table continued

Authors	Criteria used by Programs
Sanford Maine... (1993)	Testing, Instructional levels increased
Wisconsin Work... (1993)	Testing
Hellman (1992)	Testing
Striving... (1992)	Testing
Workplace literacy... (1992)	Testing
Carr (1990)	Testing
Kissac & Clymer-Spradling (1990)	External evaluation, Testing
Working smart... (1990)	Testing
Gross (1989)	Testing
	Participant Performance (n=13)
Basic skills... (1995)	Testing, Grade level
De Zeeuw & Klemme (1995)	Testing, Task completion
Burkhart & Sullivan (1993)	Employee participation
Howell (1993)	Questionnaire results, Student's work
Sanford Maine... (1993)	Testing, Instructional levels increased
Merlin (1993)	High level satisfaction
Building integrated... (1992)	Student participation
Mercer County... (1992)	Employee and employer surveys
Crandall & Pharness (1991)	Students writing
O'Gorman (1991)	Earned certificates of completion
Breeden & Bowen (1990)	Student participation
POWER for... (1990)	Improvement on job
Burenstein (1989)	Student participation